



CSE OTS ZV W PWM

Installation and Operation Manual
CSE OTS ZV W PWM PUMP STATION
with non-return valve, for heating systems

EN

1. Introduction

CSE OTS ZV W PWM Pump Station is designed to be installed in unmixed hydraulic heating circuits where a non-return valve is required. The Pump Station provides circulation through the concerned heating circuit while preventing circulation in the opposite direction. The pump speed is controlled by the PWM signal. With no PWM signal the pump runs at max. speed.

2. Description of the pump station

Main features	
Application	flow to heating systems with pump speed controlled by PWM signal; with no PWM signal the pump runs at max. speed
Description	consists of a Wilo Yonos PARA RS pump, a ball valve with a non-return valve, fittings with a ball valve, thermometer and insulation
Working fluid	water, water-glycol mixture (max. 1:1) or water-glycerine mixture (max. 2:1)
Installation	on a flow pipe in heating systems, the min. distance of the pipe axis from a wall is 100 mm
Code	17 284

Technical Data for CSE OTS ZV W PWM pump station	
Fluid working temperature	2 - 100 °C
Working pressure	6 bar
Max. ambient temperature	58 °C
Power supply	230 V, 50 Hz
Insulation material	EPP RG 60 g/l
Overall dimensions	325 x 140 x 150 mm
Total weight	2.9 kg
Connections	2x G 1" F

Ball valve with non-return valve

Operation data	
Max. fluid temperature	120 °C
Max. working pressure	16 bar

3. Flow direction



4. Wilo Yonos PARA RS 25/7,5 PWM 1 Pump

Design

Wet-running circulation pump with G 6/4" M connection.

Electrical data	
Power supply	1 ~ 230 V, 50 - 60 Hz
Power input (min./max.)	4 / 75 W
Current (min./max.)	0,04 / 0,66 A
Max. speed	4770 rpm
Speed control	frequency inverter
Energy Efficiency Index	≤ 0,21 by EN 16 297/3
IP rating	IPX4D
Motor protection	integrated

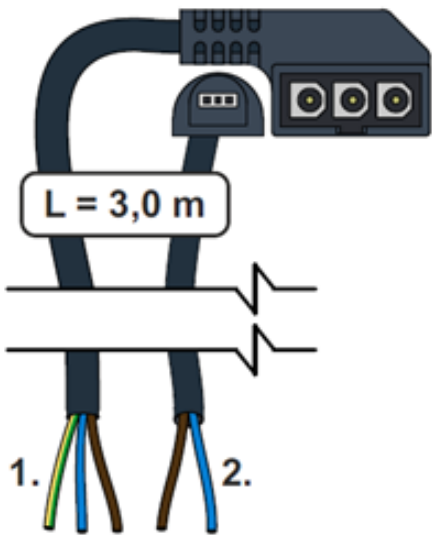
Minimum pressure at the suction port	
Min. pressure at the suction port to avoid cavitation	0.5 mH ₂ O at 50 °C
	4.5 mH ₂ O at 95°C



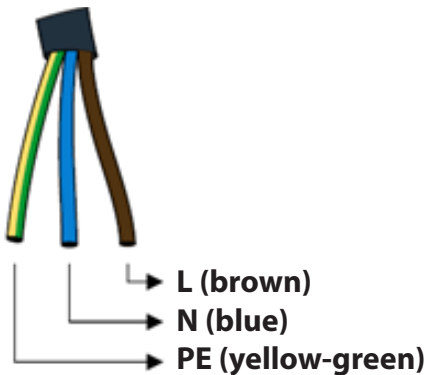
Operation data

Fluid working temp.	0 to 100 °C at 58 °C ambient temperature
Max. working pressure	6 bar
Max. head	7.6 m

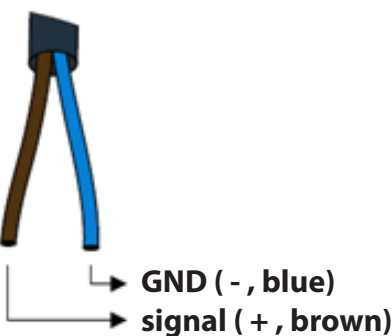
Wilo Yonos PARA RS 25/7,5 PWM 1 pump wiring



1. POWER SUPPLY (1~ 230 V, 50 Hz)



2. CONTROL (PWM)



Performance curves for Wilo Yonos PARA RS 25/7,5 PWM 1 pump

External control via PWM1

